DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/08/10 has been entered.

Response to Amendment

Withdrawn Rejections

2. The 35 U.S.C. 112, 1st paragraph rejection of claim 17 in the Office action dated 12/09/09 is withdrawn due to Applicant's amendment dated 3/08/10.

3. The 35 U.S.C. 103(a) rejection of claims 1, 3, 6, 15 over Jackson in view of Yamazaki is withdrawn due to Applicant's amendment dated 3/08/10.

4. The 35 U.S.C. 103(a) rejection of claim 17 over Jackson in view of Brown is withdrawn due to Applicant's amendment dated 3/08/10.

New Rejections

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 18-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not appear to support the recitation of "color filters embedded in the second adhesive layer". Clarification with citations from the specification and/or correction are required.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim 1, 3, 15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson (US 4,931,782) in view of Brown (US 6,835,950).

Regarding claim 1, Jackson teaches a display unit in Fig. 2, shown on a following page, comprising: a display panel and a flexible touch panel (touch screen overlay on the viewing surface of a visual display device formed from a flexible membrane laminate, abstract) which (a) is composed of plastic films (flexible laminate comprises

first and second flexible substrates formed of transparent polyester material, abstract, touch screen overlay 10 comprises a lower substrate 32 formed from a sheet of polyester, thin, about 5 mil, column 6, lines 1-10, upper substrate 36 formed of the same polyester, on the order of 2 mils, column 6, lines 27-32), (b) is directly bonded to a whole face of the display panel with an adhesive layer in between (lower substrate may be directly attached to the glass display surface 13 of the CRT 12 by a thin layer of transparent adhesive 33, column 6, lines 10-15) and (c) detects contact with a suitable contact element thereon (permits either finger touch or stylus detection input, column 5, lines 28-33), wherein the adhesive layer 33 is in direct contact with both a protective member 13 for protecting the display 12 and one of the plastic films 32 (lower substrate 32 formed from a sheet of polyester material … may be directly attached to the glass display surface 13 of the CRT 12 by a thin layer of transparent adhesive 33, column 6, lines 5-15, Fig. 2). In the one embodiment, Jackson teaches that the display panel comprises a cathode ray tube 12 (CRT, column 6, lines 10-15) which is sealed by a protective member 13 (glass display surface, column 6, lines 10-15) such that the cathode ray tube 12 is isolated from the flexible touch panel 10 and hence fails to teach that the display panel comprises a plurality of display devices, wherein each of the plurality of display devices has an organic emitting layer made of organic electro luminescence material, and which are sealed by the protective film such that the display devices are isolated from the flexible touch panel.

However, Jackson teaches that the cathode ray tube in the display panel can be replaced by a plurality of light emitting display devices (light emitting diode arrays, column 1, lines 14-20), but is silent regarding the specifics of such a display panel.

Brown teaches a display panel in Fig. 3 shown on a following page (organic electrochromic display, column 1, lines 10-15) comprising a driving panel having a substrate 110 with a plurality of display devices 116 thereon (OLED region, column 8, lines 22-37, two-dimensional OLED arrays, column 1, lines 17-30, Fig. 3) wherein each of the plurality of display devices has an organic emitting layer (OLED is short for organic light emitting diode/display), which is ordinarily made of electroluminescence material, and a protective film 126 formed directly on both (a) the substrate 110 and (b) the plurality of display devices 116 (column 7, lines 58-60, Fig. 3); and a sealing panel 120 (barrier layer 120, “face seal”, column 8, lines 22-25), wherein the driving panel and the sealing panel 120 are secured together by means of a first adhesive layer 130 (column 7, lines 43-47), the protective film 126 includes an inorganic material (silicon oxide, silicon nitride, column 8, lines 3-6) which is effective to isolate the plurality of display devices 116 from moisture (semiconductors such as silicon offer good barrier properties to water, column 5, lines 62-65).

Therefore, since Jackson is silent regarding the specifics of the display panel comprising the plurality of light emitting display devices, it would have been necessary and hence obvious to have looked to the prior art for a suitable one. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used the display panel comprising light emitting display devices of Brown, which

includes a substrate on which the plurality of light emitting display devices are formed, and a protective film formed directly on both the (a) substrate and (b) the plurality of display devices, for the purpose of protecting and isolating the plurality of light emitting display devices, wherein each of the plurality of light emitting display devices has an organic light emitting layer made of organic electro luminescence material, as the display panel comprising light emitting display devices in the display unit of Jackson, such that the protective film of the display panel seals and isolates the plurality of light emitting display devices from the touch panel, in order to obtain a display panel with the desired display characteristics and long operating life.

In addition, Jackson teaches that the touch panel 10 and the sealing panel 13 are secured together by means of a second adhesive 33 on the whole surfaces (glass display surface, column 6, lines 10-15, Fig. 2), which means that the whole face of the display panel includes the sealing panel between the driving panel and the touch panel, that is formed directly on (a) the second adhesive layer. Jackson, as modified by Brown, fails to teach that the sealing panel between the driving panel and the touch panel, additionally is formed directly on (b) at least one filter.

However, Brown teaches that the display panel can provide a color display ([0002]). A common way of providing a color display is to provide a color filter layer under the sealing panel 120 (Fig. 3) when the display panel is a top-emitting display ([0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided a color filter layer under the sealing

panel of the display panel of Jackson, as modified by Brown, such that the sealing panel is formed directly on both the (a) second adhesive layer and (b) the color filter, in order to obtain the desired color display.

Regarding claim 3, Jackson teaches that the touch panel has a structure that includes two plastic films 32 and 36 (Fig. 2), in which respective transparent electrodes 34 and 38 are formed and are layered so that the transparent electrodes 34 and 38 are placed opposite each other (On the upper surface of the lower substrate 32 is deposited … array of transparent electrodes 34, column 6, lines 10-20, upper substrate 36 formed of the same polyester material as the lower substrate 32 … On the lower surface of the upper substrate is deposited an array of transparent conductors 38, column 6, lines 27-35, Fig. 2).

Regarding claim 15, Jackson teaches that the suitable contact element is a finger or a pen (permits either finger touch or stylus detection input, column 5, lines 28-33).

Regarding claim 17, Jackson teaches a display panel in Fig. 2, shown on a following page, comprising: a driving panel and a flexible touch panel (touch screen overlay on the viewing surface of a visual display device formed from a flexible membrane laminate, abstract) which (a) is composed of plastic films (flexible *9laminate comprises first and second flexible substrates formed of transparent polyester material, abstract, touch screen overlay 10 comprises a lower substrate 32 formed from a sheet of polyester, thin, about 5 mil, column 6, lines 1-10, upper substrate 36 formed of the same polyester, on the order of 2 mils, column 6, lines 27-32) and (b) detects contact with a suitable contact element thereon (permits either finger touch or stylus detection

input, column 5, lines 28-33). In the one embodiment, Jackson teaches that the driving panel which is inherent in the display panel, comprises a cathode ray tube 12 (CRT, column 6, lines 10-15) which is sealed by a sealing panel which has a sufficiently rigid layer 13 (glass display surface, column 6, lines 10-15) such that the cathode ray tube 12 is effectively isolated from the flexible touch panel 10, and hence fails to teach that the display panel comprises a plurality of display devices, wherein each of the plurality of display devices has an organic emitting layer made of organic electro luminescence material, and which are sealed by the sealing panel such that the plurality of display devices are isolated from the flexible touch panel.

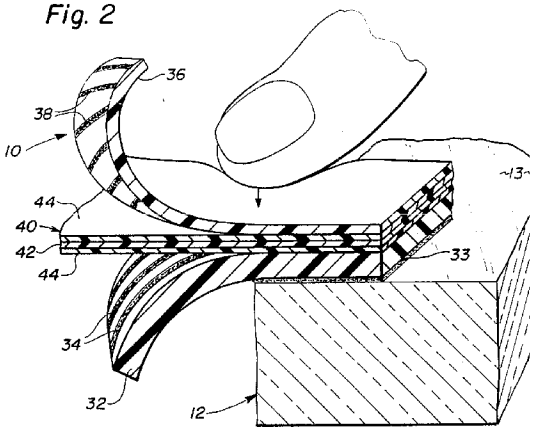
However, Jackson teaches that the cathode ray tube in the driving panel of the display panel can be replaced by a plurality of light emitting display devices (light emitting diode arrays, column 1, lines 14-20), but is silent regarding the specifics of such a display panel.

Brown teaches a display panel in Fig. 3 shown on a following page (organic electrochromic display, column 1, lines 10-15) comprising a driving panel having a substrate 110 with a plurality of display devices 116 thereon (OLED region, column 8, lines 22-37, two-dimensional OLED arrays, column 1, lines 17-30, Fig. 3) wherein each of the plurality of display devices has an organic emitting layer (OLED is short for organic light emitting diode/display), and a protective film 126 formed directly on both (a) the substrate 110 and (b) the plurality of display devices 116 (column 7, lines 58-60, Fig. 3); and a sealing panel 120 (barrier layer 120, “face seal”, column 8, lines 22-25), wherein the driving panel and the sealing panel 120 are secured together by means of a

first adhesive layer 130 (column 7, lines 43-47), the protective film 126 includes an inorganic material (silicon oxide, silicon nitride, column 8, lines 3-6) which is effective to isolate the plurality of display devices 116 from moisture (semiconductors such as silicon offer good barrier properties to water, column 5, lines 62-65).

Therefore, since Jackson is silent regarding the specifics of the display panel comprising the plurality of light emitting display devices, it would have been necessary and hence obvious to have looked to the prior art for a suitable one. As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used the display panel comprising light emitting display devices of Brown, which includes a substrate on which the plurality of light emitting display devices are formed, and a protective film formed directly on both the (a) substrate and (b) the plurality of display devices, for the purpose of protecting and isolating the plurality of light emitting display devices, wherein each of the plurality of light emitting display devices has an organic light emitting layer made of organic electro luminescence material, as the display panel comprising light emitting display devices in the display unit of Jackson, such that the protective film of the display panel seals and isolates the plurality of light emitting display devices from the touch panel, in order to obtain a display panel with the desired display characteristics and long operating life.

Fig. 2



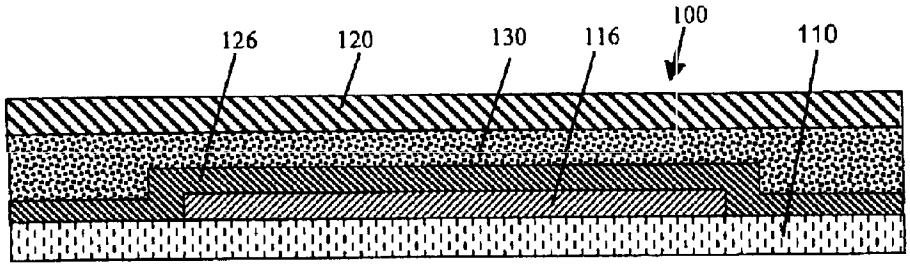


Fig. 3

In addition, Jackson teaches that the touch panel 10 and the sealing panel 13 are secured together by means of a second adhesive 33 (glass display surface, column 6, lines 10-15, Fig. 2), which means that the sealing panel between the driving panel and the touch panel, is formed directly on (a) the second adhesive layer. Jackson, as modified by Brown, fails to teach that the sealing panel between the driving panel and the touch panel, is formed directly on (b) at least one filter.

However, Brown teaches that the display panel can provide a color display ([0002]). A common way of providing a color display is to provide a color filter layer under the sealing panel 120 (Fig. 3) when the display panel is a top-emitting display ([0006]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have provided a color filter layer under the sealing panel of the display panel of Jackson, as modified by Brown, such that the sealing panel is formed directly on both the (a) second adhesive layer and (b) the color filter, in order to obtain the desired color display.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson in view of Brown as applied to claims 1, 3, 15, 17 above, and further in view of Yamazaki (US 2002/0153360).

Jackson, as modified by Brown, teaches the display panel comprising organic light emitting display devices, as described above. Jackson, as modified by Brown, fails to teach the claimed details of the structure of each respective organic light emitting display device.

However, Yamazaki teaches that each respective organic light emitting display device ([0202]) includes an organic light emitting layer 713 between a first electrode 711 which is an anode (pixel electrode, [0212], anode of a light-emitting element, [0209]) and a second electrode 714 which is a cathode ([0214]) wherein the lights generated from the organic light emitting layer is extracted from the second electrode side (anode 711 to organic light emitting layer 713 to cathode 714, Fig. 12), for the purpose of providing the desired direction of light emission for the display.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have used as a structure for each respective organic light emitting display device of the display panel of Jackson, as modified by Brown, one

where the organic layer includes a light emitting layer between a first electrode and a second electrode, and the respective organic light emitting device extracts the lights generated in the light emitting layer from the second electrode side, in order to obtain the desired direction of light emission for each display device, as taught by Yamazaki.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample, can be reached on (571)272-1376. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sophie Hon/

Sow-Fun Hon

Examiner, Art Unit 1794